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PATENT APPLICATION  
Docket: 9311.0006

#5

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

STEVEN B. SMITH

Serial No:

09/536,273

) Art Unit: N/A

Filed:

March 27, 2000

For:

METHODS AND APPARATUS FOR  
WIRELESS POINT-OF-SALE  
TRANSACTIONSPETITION TO MAKE SPECIALAssistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Applicant respectfully requests that examination of the above-referenced patent application be advanced out of turn and that the prosecution be performed in an expedited manner. Applicant believes all claims are presented to a single invention and will make an election without traverse if the Office determines that all claims are not obviously directed to a single invention. Thus, in conformance with 37 C.F.R. § 1.102(d), Applicant submits this written Petition accompanied by the filing fee set forth in 37 C.F.R. § 1.17(i).

Applicant has caused to be made a careful and thorough pre-examination search of the prior art. This search was performed by a professional searcher working for Noreen A. Fabean

who searched the U.S. patented art in Class 235, subclass 381, Class 455, subclasses 66, 536, 557, Class 340, subclass 825.33, and Class 705, subclass 26. A copy of each potentially relevant reference discovered in these searches is not provided herewith because copies have already been submitted with an Information Disclosure Statement.

The following relevant references were discovered in the above-referenced pre-examination searches and will be discussed in detail below:

USPN 5,979,757	Tracy et al.
USPN 5,952,638	Demers et al.
USPN 5,936,544	Gonzales et al.
USPN 5,898,904	Wang et al.
USPN 5,884,140	Ishizaki et al.
USPN 5,857,023	Demers et al.
USPN 5,844,808	Konsmo et al.
USPN 5,822,230	Kikinis et al.
USPN 5,781,723	Yee et al.
USPN 5,724,518	Helbling et al.
USPN 5,546,303	Helbling et al.
USPN 5,544,784	Malaspina
USPN 5,361,871	Gupta et al.
USPN 4,553,211	Kawasaki et al.
USPN 4,120,452	Kimura et al.
USPN 6,021,362	Maggard et al.
USPN 6,021,399	Demers et al.

#### DETAILED DISCUSSION OF THE REFERENCES AS SPECIFIED IN

##### 37 C.F.R. § 1.111(b) AND (c)

#### I. NATURE OF THE PRESENT INVENTION

Preferred embodiments of the present invention provide systems, methods and apparatus which provide for short-range communication with a point-of-sale device combined with long-range communication with a credit or debit authorization processor. As a non-limiting example, an embodiment of the present invention in the form of a PDA may communicate with a point-of-sale device to determine vendor identification and a sale amount. The vendor/sale data is

combined with credit or debit account data and forwarded to an authorization processor as a request for authorization of the sale amount. The authorization processor processes the request and transmits an authorization approval or denial to the PDA through a long-range communication system. The authorization is then transmitted to the vendor's point-of-sale device to complete the transaction.

Embodiments of the present invention allow for transactions with multiple vendors. A consumer with a wireless purchasing device (WPD) may enter an area in which several vendors have point-of-sale devices which can communicate with the WPD. As the consumer enters communication range with the point-of-sale devices, a menu on the WPD is updated to reflect the products available from vendors in communication range along with associated prices and related data. A consumer may select from the available products and initiate the purchase. Vendor information, product identification and pricing data received from the point-of-sale devices is processed into purchase requests for each vendor selected and the purchase requests are transmitted to one or more authorization processors. If the purchases are authorized, the authorization approval is transmitted back to the WPD and the consumer completes the transaction by transmitting a charge or debit authorization to the point-of-sale devices thereby enabling product access or delivery of the purchased products.

Some embodiments of the present invention are particularly advantageous in that they allow a vendor to obtain point-of-sale purchase authorization regardless of whether that vendor has a communications link with an authorization processor. In this manner, the transaction may be completed without any direct communication between a vendor and an authorization processor or financial institution. This method allows a vendor to operate a WVD at a point of sale without the expense and inconvenience of a long-range communication connection. This

method also allows the consumer to retain confidential account information without disclosure to vendor personnel or exposure to the risks present in the vendor's system.

## II. DESCRIPTION OF REFERENCES FOUND IN THE PRE-EXAMINATION SEARCH

### A. Tracy et al.

United States Patent No. 5,979,757, issued on November 9, 1999 to Tracy et al., discloses a portable shopping or self-scanning system that can retrieve data stored at remote addresses by employing a wireless communication network. In one embodiment, a portable terminal having an integrated machine code reader and a radio is provided with a graphical user interface such as a web browser. The terminal is provided with a display for illustrating help and instructional files associated with a selected item identified with the machine code reader. For example, a warehouse clerk who reads a bar code from a box of potato chips will automatically retrieve from the central host an instruction file instructing the person where to forward the package.

Alternatively, a consumer may use a hand-held terminal to self-scan products, thereby receiving marketing, pricing, and additional information from a central host.

The claims of the present invention are readily distinguishable from the teachings of Tracy et al. This becomes apparent upon examination of the independent claims 1, 5, 9, 13, and 19 of the present invention. First, independent claims 1 and 2 recite a wireless purchase device comprising "a long-range communications device for communicating with an authorization processor." Tracy et al. does not teach a purchase device that communicates with an authorization processor. The Tracy et al. device uses a short-range network to retrieve purchase price information, but does not use long-range communication to communicate directly with an authorization processor such as a credit card company.

Second, the independent claims 9, 13, and 19 all recite a method comprising "requesting

purchase authorization from an authorization provider" and transmitting a transaction denial or approval "to said WPD" depending on whether the purchase is authorized by the authorization provider. Again, Tracy et al. does not teach the transmission of a transaction denial or approval to a wireless purchase device. The Tracy et al. purchasing device does not communicate with an authorization provider.

In light of the above, Tracy et al. clearly does not anticipate nor render obvious the independent claims 1, 5, 9, 13, and 19 of the present invention. Since the dependant claims add further limitations to the independent claims, Tracy et al. thus also does not anticipate nor render obvious the dependent claims.

Applicant respectfully emphasizes that the differences between Tracy et al. and the present invention are by no means limited to those presented in the discussion above. Applicant only suggests that the mentioned distinctions by themselves are sufficient to show that all the claims are neither anticipated nor rendered obvious by Tracy et al. The same is true for each of the references discussed in the present Petition.

B. Demers et al.

United States Patent No. 5,952,638, issued on September 14, 1999 to Demers et al., discloses a method of space efficient electronic payment microtransactions. In particular, electronic payments are made in the form of electronic bits representing a small value (for example, \$ .01 or \$.25) that has previously been agreed upon with a financial services provider. The customer communicates with a seller off-line to receive purchase information and to enter into transactions.

The claims of the present invention are readily distinguishable from the teachings of Demers et al. As indicated above, all the independent claims of the present invention recite

either a wireless purchase device comprising a long-range communications device for communicating with an authorization processor or a method comprising requesting purchase authorization from an authorization provider who transmits a transaction denial or approval to a wireless purchase device. Demers et al. does not teach long-range communications between an authorization processor and a wireless purchase device; nor does Demers et al. teach the transmission of an authorization provider's transaction denial or approval to a wireless purchase device. Hence, Applicant respectfully submits that claims 1, 5, 9, 13, and 19 are neither anticipated nor rendered obvious by Demers et al. The same goes for any claims which depend from these independent claims.

C. Gonzales et al.

United States Patent no. 5,936,544 issued on August 10, 1999 to Gonzales et al., discloses a system which is largely unrelated to the present invention. In particular, Gonzales et al. teaches a wireless access system comprising wireless control modules that can be mounted on any locked entrance. The wireless control module requests authorization from an authorizing unit which, in turn, either provides or denies authorization.

The claims of the present invention are readily distinguished from the teachings of Gonzales et al. because, as required by independent claims 1 and 5, Gonzales et al. does not teach a "short-range communications device for communicating with a point-of-sale wireless vendor device." Also, Gonzales et al. does not teach a method comprising requesting purchase authorization from an authorization provider, as required by claims 9, 13, and 19. Accordingly, Applicant respectfully submits that claims 1, 5, 9, 13, and 19 are neither anticipated nor rendered obvious by Gonzales et al. The same goes for any claims which depend from these independent claims.

D. Wang

United States Patent No. 5,898,904, issued on April 27, 1999 to Wang, discloses another system that is largely unrelated to the present invention. Wang teaches a two-way data network that includes a broadcast control sub-network as well as a cellular data sub-network. The particular structure of the Wang system provides two-way communication capability by leveraging the existing infrastructure of one-way paging.

The claims of the present invention can readily be distinguished by the teachings of Wang because, among other things, Wang does not teach a wireless point-of-sale purchase device as required by each of the independent claims of the present invention. Applicant thus respectfully submits that claims 1, 5, 9, 13, and 19 are neither anticipated nor rendered obvious by Wang. The same goes for any claims which depend from these independent claims.

E. Ishizaki et al.

United States Patent No. 5,884,140, issued on March 16, 1999 to Ishizaki et al., teaches an information distribution system comprising a first transmission station for transmitting a first signal carrying information to a second transmission station. The second transmission station broadcasts a second signal carrying the information to an area around a place at which the second transmission station is located. A terminal with a display unit receives the second signal, which is wireless.

The claims of the present invention are readily distinguished from the Ishizaki et al. disclosure. Ishizaki et al. does not teach a long-range communications device for communicating with an authorization processor, as required by claims 1 and 5 of the present invention. Ishizaki et al. also does not teach a method comprising transmitting a transaction denial or approval to a wireless purchase device depending upon authorization by an authorization provider, as required

by independent claims 9, 13, and 19 of the present invention. Applicant thus respectfully submits that claims 1, 5, 9, 13, and 19 are neither anticipated nor rendered obvious by Ishizaki et al. The same goes for any claims which depend from these independent claims.

F. Demers et al.

United States Patent No. 5,857,023, issued on January 5, 1999 to Demers et al., discloses a method of redeeming electronic payments generated by and received from a customer using a master key unknown to the seller. In anticipation of making electronic payments, a customer sends a bank a master key that he or she will use to generate electronic payments. Later, the bank receives from the seller a redemption request, and the bank authenticates the electronic payment by comparing the electronic payment to a hash of a string including the master key. If the electronic payment is authenticated, the bank determines an amount due to the seller and credits that amount to the seller.

Demers et al. does not anticipate the claims of the present invention because, as with the previously discussed Demers et al. reference, it does not teach a wireless purchase device for communicating with an authorization processor; nor does it teach a method comprising requesting purchase authorization from an authorization provider and transmitting a transaction denial or approval to a wireless purchase device depending on whether the purchase is authorized. Hence, Applicant again respectfully submits that claims 1, 5, 9, 13, and 19 are neither anticipated nor rendered obvious by Demers et al. The same goes for any claims which depend from these independent claims.

G. Konsmo et al.

United States Patent No. 5,844,808, issued on December 1, 1998 to Konsmo et al., discloses methods for monitoring a distributed system for supplying goods or services. The



systems includes a plurality of vending machines with sensors and microcontrollers. Two-way communication between the vending machines and a host computer enable the monitoring of specified events such as sales of goods, unauthorized entry, and notification of low inventory stock.

Konsmo et al. does not anticipate the claims of the present invention because Konsmo et al. does not disclose a wireless purchase device that communicates with an authorization processor, as required by claims 1 and 5 of the present invention. Nor does Konsmo et al. teach a method comprising requesting purchase authorization from an authorization provider and transmitting a transaction denial or approval to a wireless purchase device depending upon whether the purchase is authorized, as required by claims 9, 13, and 19 of the present invention. Applicant thus respectfully submits that claims 1, 5, 9, 13, and 19 are neither anticipated nor rendered obvious by Konsmo et al. The same goes for any claims which depend from these independent claims.

H. Kikinis et al.

United States Patent No. 5,822,230, issued on October 13, 1998 to Kikinis et al., discloses a special type of personal digital assistant that may be inserted into a docking bay attached to a software vending machine. Thus docked, the personal digital assistant allows a user to review the software for sale by selecting from a menu displayed on the personal digital assistant. The user can select certain applications to try them out, to purchase them, and to download them.

As with many of the references discussed, Kikinis et al. does not anticipate nor make obvious the present invention as defined by the claims. Kikinis et al. does not disclose a wireless purchase device that communicates with an authorization processor, as required by independent

claims 1 and 5. Kikinis et al. also does not disclose a method comprising requesting purchase authorization from an authorization provider and transmitting a transaction denial or approval to a wireless purchase device depending on whether authorization is received by the authorization provider, as required by the independent claims 9, 13, and 19. Therefore, Applicant respectfully submits that claims 1, 5, 9, 13, and 19 are neither anticipated nor rendered obvious by Kikinis et al. The same goes for any claims which depend from these independent claims.

I. Yee et al.

United States Patent No. 5,781,723, issued on July 14, 1998 to Yee et al., teaches a system for identifying the type and attributes of a portable information device to a computing unit that is in communication with the portable information device. This identification is enabled in part by using an embedded device class tag that is permanently kept secret on the portable information device. A manufacturer or vendor registers the portable information device with a certifying authority such as a bank. Thereafter, the portable information device can enter into transactions with the computing unit using a certificate from the certifying authority.

The claims of the present invention are readily distinguishable from the Yee et al. disclosure. Independent claims 1 and 5 of the present invention are directed towards a wireless purchase device that communicates with an authorization processor and that includes a short-range communications device for communicating with a point-of-sale wireless vendor device. Independent claims 9, 13, and 19 are directed towards a method comprising requesting purchase authorization from an authorization provider and transmitting a transaction denial or approval to a wireless purchase device depending on whether the authorization provider has given authorization. Yee et al. does not teach these elements required by the independent claims; Yee et al. is directed towards a system for self-identifying a portable information device to a

computing unit. Therefore, Applicant respectfully submits that claims 1, 5, 9, 13, and 19 are neither anticipated nor rendered obvious by Yee et al. The same goes for any claims which depend from these independent claims.

J. Helbling

United States Patent No. 5,724,518, issued on March 3, 1998 to Helbling, discloses a system for correlating charitable contributions in food service establishments. A perspective donor, generally also a patron of the fast food establishment, selects food items offered by the cashier at a register. The patron is offered the opportunity to make a certain minimum donation to a particular charity, and the cashier punches into the cash register the amount of contribution. Data as to charitable contribution amounts and the respective donees is transmitted by restaurant computer to a central computer at which the accounts of various charities are credited with the contributions made. The account of the central station can be debited and a transfer made directly to an account of the charity.

The claims of the present invention are clearly distinguishable from the Helbling disclosure. As with many of the previously discussed references, Helbling does not disclose a wireless point-of-sale purchase device including a long-range communications device for communicating with an authorization processor as well as a short-range communications device for communicating with a point-of-sale wireless vendor device. Helbling also does not disclose a method comprising requesting purchase authorization from an authorization provider and transmitting a transaction denial or approval to a wireless purchase device if the purchase is denied or approved. Thus, Applicant respectfully submits that claims 1, 5, 9, 13, and 19 are neither anticipated nor rendered obvious by Helbling. The same goes for any claims which depend from these independent claims.

K. Helbling

United States Patent No. 5,546,303, issued on August 13, 1996 to Helbling, does not anticipate the present invention for the same reasons that the previously discussed Helbling reference does not anticipate the present invention. Applicant thus respectfully submits that claims 1, 5, 9, 13, and 19 are neither anticipated nor rendered obvious by Helbling. The same goes for any claims which depend from these independent claims.

L. Malaspina

United States Patent No. 5,544,784, issued on August 13, 1996 to Malaspina, is largely unrelated to the present invention. Malaspina discloses a vending machine for rechargeable batteries that includes a communications relay station mounted on it for short-range wireless communications systems. The vending machine includes a credit card reader that is well known and used in applications such as public telephones and gasoline service pumps. Malaspina does not disclose a long-range communications device for communicating with an authorization processor, as required by independent claims 1 and 5 of the present invention; nor does Malaspina disclose a method comprising requesting purchase authorization from an authorization provider and transmitting a transaction denial or approval to a wireless purchase device if authorized or denied, as required by independent claims 9, 13, and 19 of the present invention. Applicant respectfully submits that claims 1, 5, 9, 13, and 19 are neither anticipated nor rendered obvious by Malaspina. The same goes for any claims which depend from these independent claims.

M. Gupta et al.

United States Patent No. 5,361,871, issued on November 8, 1994 to Gupta et al., discloses a portable remote unit provided to shoppers within a retail establishment that uses bar

code scanners at a cashier's counter to record products of the shopper's purchase. The shopper's portable unit as well as the check-out counter terminal work from the same product information database so that the shopper gets the most current prices of each product.

The claims of the present invention are readily distinguished from the Gupta et al. disclosure. Each of the independent claims of the present invention require communication with an authorization provider, and such communication is not taught by Gupta et al. Applicant thus respectfully submits that claims 1, 5, 9, 13, and 19 are neither anticipated nor rendered obvious by Gupta et al. The same goes for any claims which depend from these independent claims.

N. Kawasaki et al.

United States Patent No. 4,553,211, issued on November 12, 1985 to Kawasaki et al., discloses a vending machine suitable for a guest room in a hotel. The vending machine can be used without currency such as coins; vended articles are paid for at the time of check out.

The present invention as claimed is clearly distinguishable from the Kawasaki et al. disclosure. The independent claims of the present invention require communication with an authorization provider, and such communication is not disclosed in Kawasaki et al. Therefore, Applicant respectfully submits that claims 1, 5, 9, 13, and 19 are neither anticipated nor rendered obvious by Kawasaki et al. The same goes for any claims which depend from these independent claims.

O. Kimura et al.

United States Patent No. 4,120,452, issued on October 17, 1978 to Kimura et al., discloses yet another vending system adapted to be installed in the guest room of a hotel to permit guests to buy articles without the use of coins. In one embodiment, a credit card is inserted into the vending machine in order to buy an article, and a reader on the vending machine

reads information on the card before allowing the vending items to be available for selection.

Kimura et al. does not anticipate the present invention as claimed. Independent claims 1 and 5 of the present invention require both a long-range communications device for communicating with an authorization processor and a short-range communications device for communicating with a point-of-sale wireless vendor device, and Kimura et al. does not disclose the latter devices. Also, independent claims 9, 13, and 19 recite a method comprising communicating between a wireless purchase device and a wireless vendor device to identify a vendor and establish a purchase price, and Kimura et al. does not teach this. Hence, Applicant respectfully submits that claims 1, 5, 9, 13, and 19 are neither anticipated nor rendered obvious by Kimura et al. The same goes for any claims which depend from these independent claims.

P. Maggard et al.

United States Patent No. 6,021,362, issued on February 1, 2000 to Maggard et al., discloses a system that has little to do with the present invention. Maggard et al. teaches a system for the creation and continuous real-time updating of consumer purchase behavior databases through capturing consumer purchase activity and dispensing sample products and premiums. The Maggard et al. system automatically dispenses a sample or premium at a point-of-sale in response to purchases by "qualified" consumers, such qualification occurring through the real-time recognition by the retailer's point-of-sale equipment of pre-established criteria.

Independent claims 1 and 5 of the present invention recite a wireless purchase device comprising a long-range communications device for communicating with an authorization processor as well as a short-range communications device for communicating with a point-of-sale wireless vendor device, and Maggard et al. does not teach these recited elements. Further, independent claims 9, 13, and 19 of the present invention recite a method for completing wireless

point-of-sale purchase transactions comprising, inter alia, communicating between a wireless purchasing device and a wireless vendor device to identify a vendor and establish a purchase price. Maggard et al. does not teach such a step of communicating. Hence, Applicant respectfully submits that claims 1, 5, 9, 13, and 19 are neither anticipated nor rendered obvious by Maggard et al. The same goes for any claims which depend from these independent claims.

Q. Demers et al.

United States Patent No. 6,021,399, issued on February 1, 2000 to Demers et al., discloses a method of verifying electronic payments generated using a key unknown to the verifier. In anticipation of accepting electronic payments, a seller requests and receives from a bank an electronic payment verifier that the seller uses to authenticate the electronic payments.

As with the previously discussed Demers et al. references, the present Demers et al. reference does not anticipate the claims of the present invention because Demers et al. discloses neither a long-range communications device for communicating with an authorization processor nor transmitting a transaction denial or approval to a wireless purchasing device depending on whether a purchase is authorized or denied by an authorization provider. Applicant thus respectfully submits that claims 1, 5, 9, 13, and 19 are neither anticipated nor rendered obvious by Demers et al. The same goes for any claims which depend from these independent claims.


Applicant once again respectfully emphasizes that the differences presented above between the present invention and each of the references in the present Petition are by no means limited to those presented. Applicant only suggests that the mentioned distinctions by themselves are sufficient to show that all the claims are neither anticipated nor rendered obvious by these references.

**III. SUMMARY**

In light of the foregoing, Applicant respectfully submits that the claims of the present invention contain limitations which are neither disclosed nor rendered obvious by the relevant references discovered in the pre-examination search. The unique combination of features presented in the present invention are not found in any other references. Applicant therefore respectfully submits that the instant invention is patentable over the references.

DATED this 29 day of August, 2001.

Respectfully submitted,

  
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